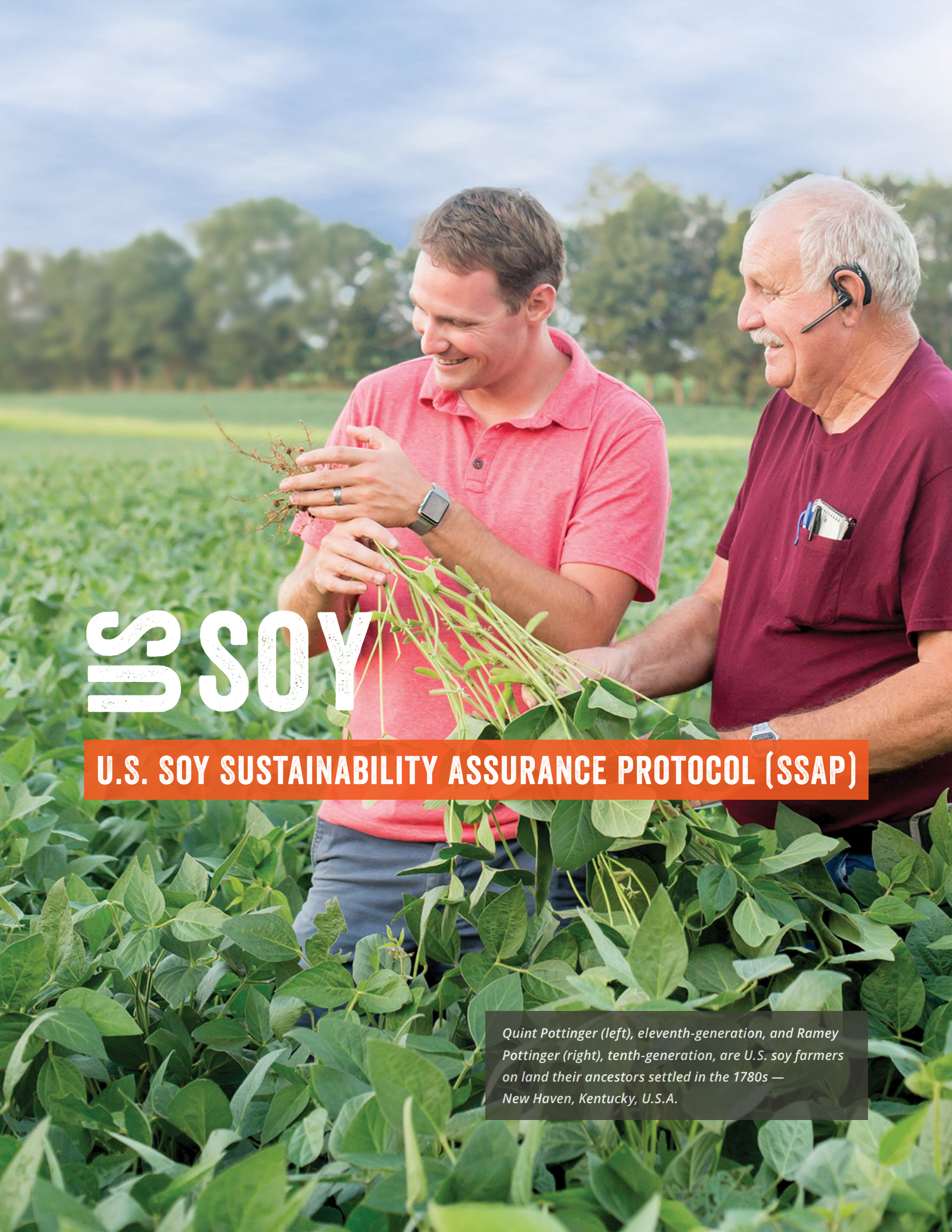


US SOY

U.S. SOY SUSTAINABILITY ASSURANCE PROTOCOL (SSAP)

Quint Pottinger (left), eleventh-generation, and Ramey Pottinger (right), tenth-generation, are U.S. soy farmers on land their ancestors settled in the 1780s — New Haven, Kentucky, U.S.A.

SINCE 1980 U.S. FARMERS INCREASED SOY PRODUCTION BY 96% WHILE USING 8% LESS ENERGY[1]

Ron Moore, third-generation U.S. soy farmer — Roseville, Illinois, U.S.A.

THE U.S. SOY SUSTAINABILITY ASSURANCE PROTOCOL IS ONE WAY THAT U.S. FARMERS CAN DEMONSTRATE THEIR COMMITMENT TO SUSTAINABILITY AND CONTINUOUS IMPROVEMENT

U.S. SOY SUSTAINABILITY ASSURANCE PROTOCOL

INTRODUCTION AND OVERVIEW

U.S. soybean production is based on a national system of sustainability and conservation laws and regulations combined with careful implementation of best production practices by the nation's 302,963 soybean farms. In addition, most U.S. soybean producers participate in certified and audited voluntary sustainability and conservation programs.

The U.S. Soy Sustainability Assurance Protocol (SSAP) is a certified aggregate approach audited by third parties that verifies sustainable soybean production at a national scale. The U.S. approach is quantifiable and results driven with mass balance international verification available.

The U.S. Sustainability Assurance Protocol describes the regulations, processes and management practices that ensure sustainable soybean production. This Sustainability Protocol is one part of the overall U.S. soybean producer sustainability program which includes a national measurement system of the positive environmental outcomes by producers.

DIRECTIVES	PROTOCOL
1	Biodiversity and High Carbon Stock Production Control Measures and Regulations
2	Production Practices Control Measures and Regulations
3	Public and Labor Health and Welfare Control Measures and Regulations
4	Continuous Improvement of Production Practices and Environmental Protection Control Measures and Regulations

AUDIT PROCEDURES

1. Over 95% of U.S. soybean producers participate in the U.S. Farm Program and are subject to audit. (approximately 23,000 audits occurred in most recent year)
2. Annual Internal Audit by Producers
3. Third-Party Independent Audits of Producers to ensure the accuracy of internal audits made by producers, third-party audits are conducted annually by the U.S. Department of Agriculture (USDA) with agents in over 2,200 offices in agricultural production areas.

INTERNATIONAL CERTIFICATION

Soy Export Sustainability, LLC will provide shipment-specific recordkeeping and documentation information for U.S. soy and ensure proper accounting of mass balance of U.S. soy compliant with this Protocol up to the time where certificates are issued for batches of compliant soybeans and soy products at point of export.

The U.S. Soy Sustainability Assurance Protocol (SSAP) was positively benchmarked against the European Feed Manufacturers' Federation's (FEFAC) Soy Sourcing Guidelines through the independent International Trade Centre (ITC) customized benchmark tool at:

http://www.standardsmap.org/fefac/

1. *Field to Market: The Alliance for Sustainable Agriculture, 2016. Environmental and Socioeconomic Indicators for Measuring Outcomes of On Farm Agricultural Production in the United States (Third Edition). ISBN: 978-0-692-81902-9.*

SOY IS A PART OF A DIVERSE CROP ROTATION PLAN PRODUCED ON 26% OF U.S. CROPLAND [2]

IN THE U.S., 78 MILLION HECTARES OF LAND ARE PROTECTED NATIONAL FORESTS AND GRASSLANDS [3]

USDA WILL SPEND $57.6 BILLION FROM 2014–2023 ON CONSERVATION [4]

April Hemmes, fourth-generation U.S. soy farmer — Hampton, Iowa, U.S.A.

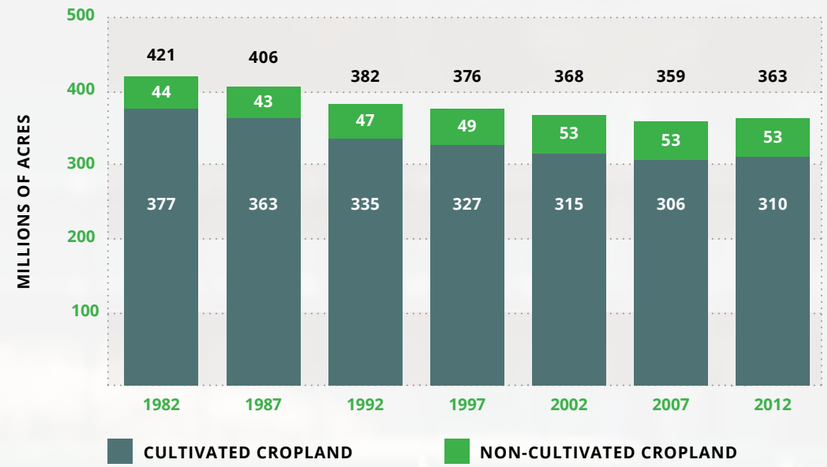
U.S. SOY SUSTAINABILITY ASSURANCE PROTOCOL

U.S. SOYBEAN PRODUCER SUSTAINABILITY PERFORMANCE INDICATORS

The following reports document producer performance for:

- Environmental and Socioeconomic Indicators for Measuring Outcomes of On-Farm Agricultural Production in the United States *http://www.fieldtomarket.org*
- Life Cycle Impact of Soybean Production and Soy Industrial Products (peer reviewed according to ISO 14040/44 Life Cycle Inventory) *http://www.ussec.org/wp-content/uploads/2015/10/U.S.-SSAP-RTRS-Comparison-Final-11-1-13.pdf*
- Benchmark with Roundtable for Responsible Soy *http://www.ussec.org/wp-content/uploads/2015/10/U.S.-SSAP-RTRS-Comparison-Final-11-1-13.pdf*

CULTIVATED & NON CULTIVATED CROPLAND



SOURCE: U.S. Department of Agriculture. 2015. Summary Report: 2012 National Resources Inventory, Natural Resources Conservation Service, Washington, DC, and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. http://www.nrcs.usda.gov

2. *Crop Production 2016 Summary (January 2017) – USDA, National Agricultural Statistics Service, pg. 52. Calculation is total soybean area planted (page 52) divided by U.S. cropland planted (page 8) http://usda.mannlib.cornell.edu/usda/current/CropProdSu/CropProdSu-01-12-2017.pdf*
3. *USDA Forest Service, https://www.fs.fed.us*
4. *Zulauf, C. "2014 Farm Bill Conservation (Title II) Programs." farmdoc daily (4):89, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, May 14, 2014. http://farmdocdaily.illinois.edu/2014/05/2014-farm-bill-conservation-title-ii-programs.html*

DIRECTIVE 1

BIODIVERSITY & HIGH CARBON STOCK

PRODUCTION CONTROL MEASURES AND REGULATIONS

Soybean production limited after January 1, 2008 in following areas:

1.1 Soybeans are not produced on highly biodiverse grassland

1.1.1 Producers are in compliance with U.S. laws that prohibit altering the habitat where endangered or threatened species are found in such a way that disrupts essential behavioral patterns including but not limited to: breeding, feeding, sheltering

1.1.2 Producers are in compliance with U.S. Endangered Species Act to protect listed animal and plant species from extinction by preserving the ecosystems in which they survive.

1.1.2.1 A Habitat Conservation Plan is required part of an application to private entities undertaking projects that might result in the destruction of an endangered or threatened species.

1.1.3 Producers are in compliance with Highly Erodible Land Conservation program

1.1.3.1 USDA will keep record of highly erodible land. Producers may obtain aerial imagery of their farms and a printout of their farm and tract records from local USDA office administering their farm

1.1.3.2 Producers will maintain compliance with highly erodible land regulations by creating a required conservation system plan

1.1.3.3 Highly erodible land is defined as soils that have an erodibility index of eight or more.

1.2 Soybeans are not produced on wetlands

1.2.1 Producers are in compliance with Section 404 of Clean Water Act regarding agricultural impacts on wetlands

1.2.2 Producers are in compliance with U.S. Wetlands Conservation provisions

1.2.2.1 USDA will keep record of Wetland determinations. Producers may obtain aerial imagery of their farms and a printout of their farm and tract records from local USDA office administering their farm

1.2.2.2 Producers will maintain compliance with wetland conservation regulations by creating a required conservation system plan

1.2.2.3 Producers will not plant on a converted wetland

1.2.2.4 Producers will not convert a wetland to make possible production of agricultural commodity

1.2.2.5 Wetland is defined as an area that: has a predominance of hydric soils; is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of water tolerant vegetation typically adapted for life in saturated soil conditions

1.3 Soybeans are not produced on continuously forested land

1.3.1 Producers are in compliance with U.S. laws regarding conversion of primary forests to other uses

1.3.2 Producers are in compliance with U.S. laws prohibiting the conversion of public lands in National Forests and Grasslands

1.4 Soybeans are not produced on peatlands

1.4.1 Producers are in compliance with Section 404 of Clean Water Act regarding agricultural impacts on peatlands

1.4.2 Producers are in compliance with U.S. Wetlands Conservation provisions that prohibit production of an agricultural commodity of peatland converted after December 23, 1985

1.4.3 Producers are in compliance with applicable state laws that prohibit changing peatland in any way without a regulated permit

1.5 Soybeans are not produced on land that was primary forest

1.5.1 Producers are in compliance with U.S. laws regarding conversion of primary forests to other uses

1.5.2 Producers are in compliance with U.S. laws prohibiting the conversion of public lands in National Forests and National Grasslands

1.6 Soybeans are not produced on designated protected areas

1.6.1 Producers are in compliance with U.S. laws that prohibit the production of soybeans on land under federal protected status, land designated Wilderness or Research Natural Areas, protected land in National Forests and Grasslands, and land in the National Landscape Conservation System

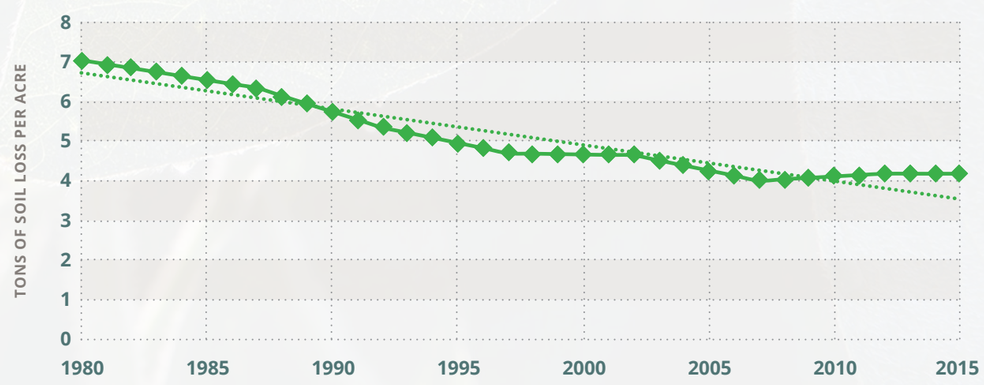
1.6.2 Producers are in compliance with U.S. laws that prohibit production of soybeans on land protected by National Park Service

1.7 Producers are in compliance with Federal Migratory Bird Treaty for protection of shared migratory bird resource

1.8 Producers planning to remove fence rows, combine crop fields, divide a crop field into two or more fields, install new drainage, or improve or modify existing drainage must notify USDA-FSA for appropriate technical determinations

1.9 Soybean producers file appropriate AD-1026 form with authorized auditing body certifying adherence to all applicable laws and regulations

ANNUAL SOIL EROSION PER BUSHEL OF SOYBEANS[5]



5. *Field to Market: The Alliance for Sustainable Agriculture, 2016. Environmental and Socioeconomic Indicators for Measuring Outcomes of On Farm Agricultural Production in the United States (Third Edition). ISBN: 978-0-692-81902-9. http://fieldtomarket.org*

PRECISION FARMING USING GPS TECHNOLOGY ALLOWS PRODUCERS TO PRECISELY APPLY FIELD INPUTS WITHIN MILLIMETERS [6]

SOIL EROSION DECREASED 66% PER TONNE OF U.S. SOY PRODUCTION SINCE 1980 [7]

91% OF U.S. SOY TRAVELS TO EXPORT POSITION BY BARGE OR RAIL [8]

Derek Haigwood, third-generation U.S. soy farmer — Newport, Arkansas, U.S.A.

DIRECTIVE 2

PRODUCTION PRACTICES

CONTROL MEASURES AND REGULATIONS

2.1 Producers will consider conservation tillage methods as appropriate. Conservation tillage control measures will:

- **2.1.1** increase soil health and organic matter
- **2.1.2** increase moisture retention
- **2.1.3** reduce soil compaction and soil erosion
- **2.1.4** reduce water and nutrient runoff
- **2.1.5** reduce energy use

2.2 Soybean seed commerce is in compliance with the Federal Seed Act regarding fair trade and proper labeling.

2.3 Producers are in compliance with Plant Protection Act regulation importation of plants and plant products.

2.4 Producers will consider crop rotation to improve soil health and biodiversity.

2.5 Producers will consider Precision Farming Techniques as appropriate utilizing Global Positioning System (GPS) and other advanced technologies.

- **2.5.1** variable rate fertilizer and herbicide application
- **2.5.2** field mapping for seed planting and herbicide and pesticide application
- **2.5.3** field mapping for fertilizer application
- **2.5.4** grid soil sampling
- **2.5.5** yield mapping

2.6 Producers will limit irrigation and comply with all applicable water conservation efforts in their irrigation districts to ensure effective and equitable allocation of water resources.

2.7 Producers will consider measures to reduce and recycle waste and meet all local regulations as related to waste recycling.

2.8 USDA will monitor soil erosion and maintain several programs to incentivize soil erosion reduction.

2.9 USDA will monitor fossil fuel use by producers and maintain several programs to incentivize fossil fuel reduction.

- **2.9.1** Producers will monitor and reduce fossil fuel use for management records and to increase enterprise viability

2.10 Producers crops will be grown under the Federal government Coordinated Framework for Regulation of Biotechnology which is a coordinated, risk-based system to ensure that new biotechnology products are safe for the environment and human and animal health.

- **2.10.1** The USDA's Animal and Plant Health Inspection Service (APHIS) is responsible for protecting agriculture from pests and diseases including regulatory oversight over products of modern biotechnology that could pose such a risk.
- **2.10.2** The Environmental Protection Agency through a registration process regulates the sale, distribution and use of pesticides in order to protect health, and the environment, regardless of how the pesticide was made or its mode of action. This includes regulation of those pesticides that are produced by an organism through techniques of modern biotechnology.
- **2.10.3** The Food and Drug Administration is responsible for ensuring the safety and proper labeling of all plant-derived food and feed, including those developed through genetic engineering.
- **2.10.4** Additional federal guidelines are in consideration under the USDA as presented by the Advisory Committee on Biotechnology and 21st Century Agriculture report, *Enhancing Coexistence*.

6. *http://www.gps.gov, GPS is operated and maintained by the U.S. Air Force. GPS.gov is maintained by the National Coordination Office for Space-Based Positioning, Navigation, and Timing.*
7. *Field to Market: The Alliance for Sustainable Agriculture, 2016. Environmental and Socioeconomic Indicators for Measuring Outcomes of On Farm Agricultural Production in the United States (Third Edition). ISBN: 978-0-692-81902-9 http://fieldtomarket.org*
8. *Study entitled FARM TO MARKET: A Soybean's Journey From Field To Consumer, page 181 https://unitedsoybean.org/wp-content/uploads/FarmToMarketStudy.pdf NOTE: Calculation is rail 44% + barge 47% = 91%*

USDA EMPLOYS OVER 12,000 PEOPLE IN CONSERVATION PROGRAMS AND COMPLIANCE [9]

John Heisdorffer, fourth-generation U.S. soy farmer — Keota, Iowa, U.S.A.

DIRECTIVE 3

PUBLIC & LABOR HEALTH & WELFARE

CONTROL MEASURES AND REGULATIONS

3.1 Producers are in compliance with U.S. Environmental Protection Agency (EPA) Worker Protection Standard for Agriculture Pesticides meeting regulations for: pesticide safety training, notification of pesticide application, use of personal protective equipment, restricted-entry intervals after pesticide application, decontamination supplies, and emergency medical assistance

- **3.1.1** An application exclusion zone of 100 feet horizontally from application equipment is required whether the pesticide is applied by air blast application, as a spray or fumigant, mist, or fog. Applicators must suspend application if they are aware of any person in the application exclusion zone per regulation in Worker Protection Standard by Environmental Protection Agency

3.2 Producers are in compliance with Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) maintaining compliance with agricultural chemical handling, storage, and application regulations

- **3.2.1** All pesticides are registered with EPA with proper labels and used in accordance with specifications including how and under what conditions chemicals can be applied
- **3.2.2** Certification and training required for pesticide applicators using restricted use pesticides
- **3.2.3** Producers adhere to EPA regulations concerning rotation of chemical active ingredients
- **3.2.4** Requires that pesticides be classified for general or restricted-use
- **3.2.5** Provides that pesticides in the restricted category may be used only under the direct supervision of certified applicators, or under such other regulatory restrictions as the EPA administrator may require
- **3.2.6** Establishes general categories of certified applicator: private applicator and commercial applicator
- **3.2.7** U.S. regulations provide penalties for violations of FIFRA regulations and violation of these instructions is equivalent to violating the law; consequences can include criminal prosecution, civil remedies for damages, and loss of license
- **3.2.8** Provide states the authority to regulate the sale or use of any federally registered pesticides in that state
- **3.2.9** Producers adhere to all Federal regulations and guidelines on farm chemical application and producers observe best management practices. Additionally, producers who apply WHO Class Ia, Ib, and II pesticides shall not apply them within 500 meters of populated areas or water bodies

3.3 U.S. is signatory to Rotterdam Convention of the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticide in International Trade enforcing a banned list of chemicals for producer use

- **3.3.1** Producers are complaint with Toxic Substances Control Act to regulate chemicals that pose an unreasonable risk to health or to the environment and to regulate these chemicals' distribution and use

3.4 Producers are in compliance with Fair Labor Standards Act which prescribes standards for basic minimum wage and prohibits the employment of children under age 16 during school hours and in certain jobs deemed dangerous

3.5 Producers are in compliance with Federal Equal Employment Opportunity Law

- **3.5.1** Prohibits discrimination against:
  - **3.5.1.1** prohibits employment discrimination based on race, color, religion, sex, or national origin
  - **3.5.1.2** protects men and women who perform substantially equal work in the same establishment from sex-based wage discrimination
  - **3.5.1.3** protects individuals who are 40 years of age or older
  - **3.5.1.4** prohibits employment discrimination against qualified individuals with disabilities
  - **3.5.1.5** prohibits employment discrimination based on genetic information
  - **3.5.1.6** provides guidelines on employee selection procedures

3.6 Producers are in compliance with Occupational Health and Safety Act (OSHA) to assure safe and healthful working conditions including workplace violence guidelines

- **3.6.1** OSHA provides ability to:
  - **3.6.1.1** Request OSHA to inspect workplace
  - **3.6.1.2** Employees may use rights under law without retaliation and discrimination
  - **3.6.1.3** Employees receive training about hazards, methods to prevent harm, and the OSHA standards that apply to their workplace
  - **3.6.1.4** The training must be in a language employees understand
  - **3.6.1.5** Employees can be terminated for noncompliance with safety regulations and employers are at risk when employees don't follow OSHA regulations

3.7 Producers are in compliance with Migrant and Seasonal Agricultural Worker Protection Act which provides safeguards to migrant and seasonal agricultural workers

3.8 Producers are in compliance with the Abolition of Forced Labor Act in that they shall not make use of any type of forced or compulsory labor including:

- **3.8.1** as a means of political coercion or education or as a punishment for holding or expressing political view or views opposed to the established political, social or economic system
- **3.8.2** as a method of mobilizing and using labor for purposes of economic development
- **3.8.3** as a means of labor discipline
- **3.8.4** as a punishment for having participated in strikes
- **3.8.5** as a means of racial, social, national, or religious discrimination

3.9 Producers are in compliance with Victims of Trafficking and Violence Protection Act providing protection and assistance for victims of trafficking regardless of immigration status

9. http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/people/

3.10 Producers follow federal and state regulations prohibiting assault and battery

3.11 Producers will recognize the Right of Association for workers, including the right to unionize or engage in collective bargaining in accordance with applicable federal and state laws.

3.12 Producers are in compliance with the Clean Air Act and its amendments to protect and enhance air resources to promote public health and welfare

3.13 Producers are in compliance with the Resource Conservation and Recovery Act which controls hazardous waste, non-hazardous solid waste, and underground storage tanks

3.14 Producers are in compliance with Safe Drinking Water Act to protect public health by preventing contamination of surface and ground sources of drinking water

3.15 Producers shall have documented evidence of land ownership, leases, or other legal agreements to utilize land for purpose of soy production and land owners were compensated with prior and informed consent.

3.15.1 The Federal Land Policy Management Act protects public lands for exploitation without authorization or rental agreement

3.15.2 Land use contracts are governed by state statutory and U.S. common law

3.15.3 The U.S. court system is the mechanism for mediating land use disputes

3.16 Producers shall engage with local communities including traditional land users to ensure that communications of concerns, complaints, or other grievances between community members and producers are understood and addressed in a collaborative manner

3.16.1 The Emergency Planning and Community Right-to Know Act supports community awareness and response to hazardous substances used in society

3.16.2 USDA cooperative extension system office is nationwide educational network that provides research based information regarding standard agricultural practices

3.16.3 Producers will follow all local regulations pertaining to burning crop residue leaving crop residue in place to provide desirable agronomic advantages including water storage and soil fertility

3.16.4 The Environmental Protection Agency Surf Your Watershed provides information about potential watershed contamination

3.17 Producers will comply with Clean Water Act Law 40 parts 116–117 which regulate discharges of designated hazardous substances. Facilities must immediately notify the National Response Center and State Agencies of any unauthorized discharge of reportable quantity of designated hazardous substance into navigable waters, the shorelines of navigable waters and contiguous zones. Discharge of harmful quantities of oil must also be reported immediately.

3.17.1 Watershed with stream reaches with demonstrated water quality concerns are listed by each state government on the US EPA Clean Water Act 303 list

3.17.2 State governments may require monitoring under Clean Water Act section 319 to insure the implementation of Best management practices and to determine how conservation measures affect water quality

3.17.3 Producers will comply with National Pollutant Discharge Elimination System (NPDES) requirements on discharges of biological pesticides, and chemical pesticides that leave a residue, into waters of the U.S.

9.6 MILLION HECTARES ARE REMOVED FROM PRODUCTION TO PROTECT ENVIRONMENT IN CONSERVATION RESERVE PROGRAM [10]

MORE THAN 3.8 MILLION HECTARES OF PRODUCTION LAND ARE ENROLLED IN CONSERVATION STEWARDSHIP PROGRAM [11]

U.S. GOVERNMENT ESTABLISHED CONSERVATION PROGRAMS IN THE 1940S AND THE FOOD SECURITY ACT OF 1985 GREATLY INCREASED CONSERVATION EFFORTS MONITORED BY USDA [12]

LAND USE PER TONNE OF U.S. SOYBEAN PRODUCTION DECREASED 35% SINCE 1980 [13]

10. *Congressional Research Service (CRS) report entitled "Agriculture Conservation: A Guide to Programs" (R40763), June 6, 2016, pages 9 and 12*
11. *http://nationalaglawcenter.org/wp-content/uploads/assets/crs/R40763.pdf*
12. *https://www.ars.usda.gov/oc/timeline/comp/*
13. *Field to Market: The Alliance for Sustainable Agriculture, 2016. Environmental and Socioeconomic Indicators for Measuring Outcomes of On Farm Agricultural Production in the United States (Third Edition). ISBN: 978-0-692-81902-9, https://fieldtomarket.org/national-indicators-report-2016/soybeans/*

DIRECTIVE 4

CONTIONOUS IMPROVEMENT OF PRODUCTION PRACTICES & ENVIRONMENTAL PROTECTION CONTROL MEASURES AND REGULATIONS

To ensure producers continuingly seek improvement to production practices and environmental protection, a variety of regulated Conservation programs and technology transfer systems for best management practices shall be established.

4.1 Conservation Reserve Program to protect the most sensitive areas by providing financial assistance to set aside on a long-term basis for cropland vulnerable to soil erosion or critical to wildlife habitat

4.2 Conservation Stewardship Program to reward producers for overall conservation performance across entire operations

4.3 Environmental Quality Incentive Program to provide financial and technical assistance to increase environmental quality of farmland still in production

4.4 Regional Conservation Partnership Program provides financial and technical assistance for multi-state or watershed-scale projects.

4.5 Conservation Effects Assessment Project to quantify the environmental effects of conservation practices and programs on the environment and develop the science base for managing the agricultural landscape for environmental quality

4.6 Cooperative Conservation Partnership Initiative to provide financial assistance for partnerships between producers and Indian Tribes, state and local government units, producer associations, farmer cooperatives, institutions of higher education, and NGOs

4.7 The National Sustainable Soybean Initiative will develop Best Management Practices (BMP) by region and determine BMP adoption rates

4.8 Technology transfer of Best Management Practices is available in numerous informational mechanisms such as: Certified Crop Advisors, Discovery Farms, on-line crop rotation data for specific geographies and soil types, plot tours, experimental field and research field days, Tactical Agriculture Programs

4.9 Producers and grain handlers utilize transportation methods such as barge and rail to reduce greenhouse gas emissions and fossil fuel use

4.10 Technology transfer and conservation programs should be available to all producers regardless of size

4.11 Field Office Technical Guides customized for local soil and conditions are available in most counties to enable better production and conservation measures by producers

4.12 Development of Additional Performance Metrics Scalability of Performance Metrics — raw data used to provide aggregated national data can be scaled down to state, or even district level crop reporting. Additional information is available to customers of U.S. soy willing to collaborate on development of quantifying smaller scale sustainability metrics

4.13 The National Association of Conservation Districts represents the United States' 3,000 conservation districts and the 17,000 men and women who serve on their boards. Conservation districts are local units of government established under state law to carry out natural resource management programs at the state level.

ENERGY USE DECREASED 42% PER TONNE OF U.S. SOYBEAN PRODUCTION SINCE 1980 [14]

Lewis Bainbridge, third-generation U.S. soy farmer — Ethan, South Dakota, U.S.A.

ENERGY BTU'S [15]

14. *Field to Market: The Alliance for Sustainable Agriculture, 2016. Environmental and Socioeconomic Indicators for Measuring Outcomes of On Farm Agricultural Production in the United States (Third Edition). ISBN: 978-0-692-81902-9, https://fieldtomarket.org*

15. *Field to Market: The Alliance for Sustainable Agriculture, 2016. Environmental and Socioeconomic Indicators for Measuring Outcomes of On Farm Agricultural Production in the United States (Third Edition). ISBN: 978-0-692-81902-9. http://fieldtomarket.org*

AUDIT PROCEDURES

ANNUAL INTERNAL AUDIT BY PRODUCERS

Each producer in the group is required to conduct an annual internal audit of compliance. The producer must submit documentation of this audit to USDA-Farm Service Agency (FSA) which must review the audit and approve this documentation prior to the participant's inclusion in the group.

THIRD-PARTY INDEPENDENT AUDIT OF PRODUCERS

To ensure the accuracy of internal audits made by producers, third-party audits are conducted annually. Third-party audits are conducted by the USDA-Natural Resource Conservation Service (NRCS) with inspection agents in over 2,200 of offices in agricultural production areas.

Each year, USDA selects at random a specified percentage of group producers for an audit. The percentage of group producers currently specified for an independent audit is not less than 5% of producers. As further described below, additional audits are carried out if USDA questions the compliance of any group producer.

The list of group producers selected for an audit will be broken down by state and county. Under each county, the following information will be displayed:

- Group producer's first and last name and/or business name
- Last four digits of the producer's tax ID number
- Group producers will be listed in every state/county where they are participating.

USDA-FSA employees based in each county print and maintain the list of group producers selected in their county. USDA-NRCS employees will perform audits on producers throughout the year for compliance.

Only the group producers identified on the national selection list are required to be audited. However, USDA employees at the state and county levels may spot check any group producer not identified on the national selection list if there is reason to question the producer's compliance.

Based on these processes — approximately 23,000 audits are annually conducted by the USDA by extensively trained inspection agents. This audit selection pool includes over 95% of U.S. soybean producers participating in the USDA Farm Program.[16]

The regulations specifying how to carry out audits are set forth in the NRCS document, National Food Security Act Manual, and are subject to further review and oversight, as deemed necessary, from USDA's Office of the Inspector General (OIG) and the U.S. Government Accountability Office (GAO).

THIRD-PARTY INDEPENDENT AUDITORS PROCESS AND QUALIFICATIONS

Detailed description of process and auditors is shown in NRCS Part 518 Compliance Review and Part 519 Quality Assurance.

Audits will be randomly selected from a national database of tracts as authorized by USDA. Audits will be performed as determined by The State Conservationist who will conduct compliance reviews within each State, as set forth in the following paragraph:

1. All employees responsible for conducting Compliance Reviews shall have the required knowledge, skills, and abilities to assess the status of both House Education and Labor Committee and Workers' Compensation compliance. If there are currently no employees in a county with the requisite training and knowledge, skills, and abilities to perform Compliance Reviews, the Area Conservationist or STC shall assign another employee the responsibility for that specific county.
2. The State Conservationist or designee shall ensure Compliance Review procedures are consistent with Parts 518 and 519, and the Quality Control Manual.
3. The State Conservationist or designee shall assure actions taken pertaining to requests for variances are executed and completed within the specified time frames.
4. The State Conservationist or designee shall assure execution of policy is consistent and uniform within the State and among adjacent States.
5. The State Conservationist or designee shall assure corrective action is taken to address deficiencies found in quality reviews
6. The State Conservationist or designee shall determine if additional reviews are required.
7. The State Conservationist or designee shall provide training and follow-up to correct deficiencies.
8. The State Conservationist or designee shall identify potential cases of fraud, waste, and abuse.

SGS, the world's leading inspection, verification, testing and certification company, conducted a review of the USDA-Natural Resource Conservation Service (NRCS) audit process, as described above, for the purpose of assessing compliance to ISO 17021-1:2015 specifically in regard to inspectors, their training and the overview of the program. Based upon document reviews including, manuals, organizational charts, maps, and compliance processes during the audit, the auditors determined that NRCS met the equivalency requirements of eight primary standards of ISO 17021–1:2015.

GREENHOUSE GAS EMISSIONS DECREASED 41% PER TONNE OF U.S. SOYBEAN PRODUCTION SINCE 1980 [17]

16. *USDA, "Record Number of Farmers and Ranchers Certified Under 2014 Farm Bill Conservation Compliance," press release, July 10, 2015, http://content.govdelivery.com/accounts/USDAOC/bulletins/10e8a2c.*
17. *Field to Market: The Alliance for Sustainable Agriculture, 2016. Environmental and Socioeconomic Indicators for Measuring Outcomes of On Farm Agricultural Production in the United States (Third Edition). ISBN: 978-0-692-81902-9, https://fieldtomarket.org*

INTERNATIONAL CERTIFICATION

Soy Export Sustainability, LLC will provide shipment-specific recordkeeping and documentation information for U.S. soybeans. To ensure proper accounting of mass balance of U.S. soybeans compliant with this Protocol up to the point where certificates are issued for batches of compliant soy at point of export, the Protocol requires the following:

1. Soy Export Sustainability, LLC, acting as the developer/owner/operator of the Protocol, will determine annually the total amount of U.S. soy that is in compliance with the Protocol, based on information provided by the authorized audit bodies.
   - **A.** This determination will be based on a calculation of the total number of soybean producing acres that the group has entered into the Protocol, and the average yield per acre recorded by the group.
2. This information will be maintained via a recordkeeping system that resides on an internet accessible database (the Database).
3. A unique certificate will be produced for each batch of U.S. soy exported under this Protocol that is compliant and recorded in the Database.
4. Shippers using the Database will establish and maintain a firm-specific record that will provide the necessary information for a uniquely-identified shipment-specific document to accompany individual U.S. soy exports.
5. In order to receive the certificate of compliance with this Protocol, a shipper or exporter desiring to transport certified soy must:
   - **A.** Register as a user of the U.S. Soy Sustainability Assurance Protocol.
   - **B.** Establish a Shipper-specific and secure record on the Database.
   - **C.** Document shipment-specific information on the Shipper-specific secure record. The record created and maintained by the Shipper will include, at a minimum, the volume and date of shipment of soy from the U.S. Additional information may be recorded by the Shipper.
   - **D.** Agree to allow Soy Export Sustainability, LLC access to the volume and date of shipment of soy from the U.S.
6. Each shipment of soy certified by this Protocol will be accompanied by a uniquely identified (numbered) shipment-specific document containing selected information from the shippers' record, and a Soy Export Sustainability, LLC attestation that the specific batch of soy follows a mass balance accounting method chain of custody from a volume of Protocol-compliant soy verified by the authorized audit body.
7. In no circumstance will a Shipper be issued a certificate if the batch in question did not follow a mass balance accounting method chain of custody from a volume of Protocol-compliant soy verified by the authorized audit body, or if the certificate would result in that soy shipment exceeding the volume of Protocol-compliant soy verified by the authorized audit body. This ensures that the volume of Protocol-compliant soy as claimed by SES-issued certificates never exceeds the total volume of Protocol-compliant soy entered into the system (recorded in point 1, above).
8. Soy Export Sustainability, LLC will use the volume and date of shipment of soy from the U.S. to manage and provide necessary reporting on the Protocol. Soy Export Sustainability, LLC will also maintain the website and an alternative/back-up system for document issuance and recordkeeping should the web-based system not be available.

For reference, the Database can be accessed at *www.usses.org*

SOY EXPORT SUSTAINABILITY LLC

SUSTAINABILITY GOALS FOR CONTINUOUS IMPROVEMENT FOR THE U.S. SOYBEAN INDUSTRY

The United States soybean family of producer organizations, including the United Soybean Board (USB), American Soybean Association (ASA), and the U.S. Soybean Export Council (USSEC), concurred upon a national strategy for further enhancing U.S. soybean sustainability through the improvement of key performance indicators (KPIs) in environmental, economic and social sectors.

U.S. SOYBEAN FARMERS' SUSTAINABILITY GOALS FOR 2025:

- Reduce land use impact by **10%** (measured as acres per bushel);
- Reduce soil erosion an additional **25%** (measured as acres per bushel);
- Increase energy use efficiency by **10%** (measured as BTUs per year):
- Reduce total greenhouse gas emissions by **10%** (measured as pounds CO2-equivelent gasses emitted per year)

The U.S. soy family commits to focusing resources on research, outreach, and measurements to make certain we are achieving these targeted goals. National benchmarks for resource use/impact per unit of production on land use, soil erosion, energy use and greenhouse gas emissions for U.S. soybeans are measured by Field to Market®, based upon 2000 national-level data received from the U.S. Department of Agriculture. Field To Market is a diverse alliance working to create opportunities across the agricultural supply chain for continuous improvements in productivity, environmental quality, and human well-being. The group provides collaborative leadership that is engaged in industry-wide dialogue, grounded in science, and open to the full range of technology choices.

The U.S. Soy family's commitment to sustainability is a long-term promise, rooted in conservation programs created by the U.S. Department of Agriculture over 75 years ago. The U.S. Soy family recognizes that sustainability is defined by continuous improvement.

ADDITIONAL INFORMATION

The Natural Resources Conservation Service and the National Agricultural Statistics Service are key agencies at work to ensure responsible agriculture production in the United States.

NATURAL RESOURCES CONSERVATION SERVICE

http://www.nrcs.usda.gov

The mission of the Natural Resource Conservation Service (NRCS) is to provide national leadership in the conservation of soil, water, and related natural resources. The NRCS provides balanced technical assistance and cooperative conservation programs to landowners and land managers throughout the United States as part of the U.S. Department of Agriculture (USDA). NRCS will invest an avergae of $5.76 billion annually from 2014 – 2023 in agriculture conservation efforts including staffing over 2,200 conservation offices employing 12,000 individuals in conservation and compliance.

NATIONAL AGRICULTURAL STATISTICS SERVICE

http://www.nass.usda.gov

The National Agricultural Statistics Service provides timely, accurate, and useful statistics in service to U.S. agriculture. The USDA's National Agricultural Statistics Service (NASS) conducts hundreds of surveys every year and prepares reports covering virtually every aspect of U.S. agriculture. Production and supplies of food and fiber, prices paid and received by farmers, farm labor and wages, farm finances, chemical use, and changes in the demographics of U.S. producers are only a few examples.

THE U.S. SOY ADVANTAGE

The foundation of the U.S. Soy Advantage is innovation, which is focused on investment in continuous improvement and meeting customer needs. Today, the U.S. Soy Advantage is anchored by exceptional composition and consistent supply of our soy and soy products, as well as the sustainability practices of the 569,998 U.S. soybean farmers.

EXCEPTIONAL COMPOSITION

U.S. soybeans have an elite meal nutritional bundle (protein, amino acids, and energy) and superior oil functionality and performance. These attributes give U.S. soy an edge over the competition with continuous (or ongoing) innovation in the pipeline to ensure the U.S. remains the leader in the soy industry.

CONSISTENT SUPPLY

We have an abundant supply of soy that can be reliably moved from the field to domestic end users or to the coasts for export using the best transportation infrastructure in the world.

SUSTAINABLE FARMING PRACTICES

U.S. soybean farmers are the most sustainable in the world. Through their commitment to continuous improvement, U.S. soybean farmers are committed to taking care of the environment, being good citizens, and producing their crop as efficiently as possible to deliver the most sustainably-grown soy in the world.

INNOVATION BEYOND THE BUSHEL

The soybean industry is constantly innovating whether it be in seed development, production practices or marketing opportunities. The U.S. soy industry vows to meet the needs of a growing world while protecting our natural resources.

US SOY

U.S. SOY FOR A GROWING WORLD

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USSEC U.S. SOYBEAN EXPORT COUNCIL

ASA American Soybean Association International Marketing

UNITED SOYBEAN BOARD